



AMPHENOL PCD SHENZHEN



EXCEL | MATE MSD

Manual Service Disconnect

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Amphenol PCD Manual Service Disconnect

Excel|Mate MSD is a safe and a reliable solution for HEV servicing.

Equipped with a two-stage lever to open the HVIL circuit prior to the separation of HV contacts, it is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit. All HV conductive contact surfaces on the receptacle assembly are finger-touch safe.

Available in a scalable design with a variety of fuse ratings.

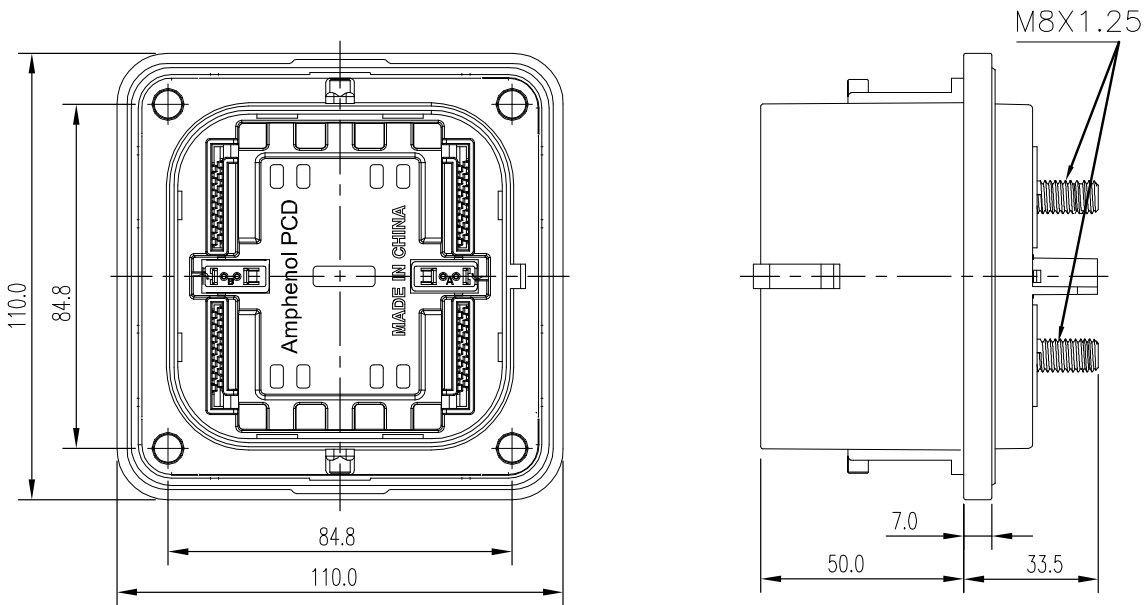
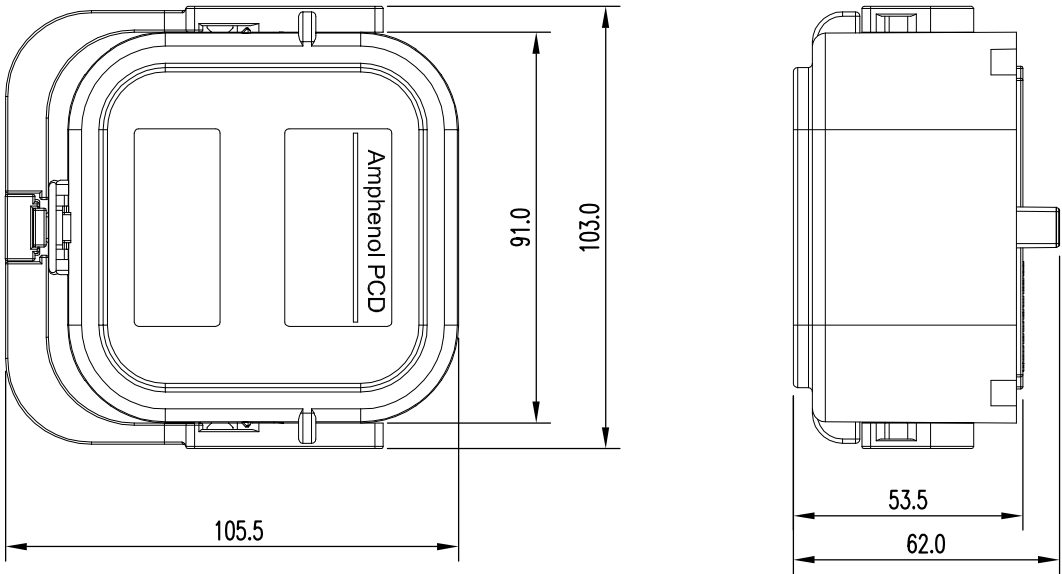


KEY FEATURES

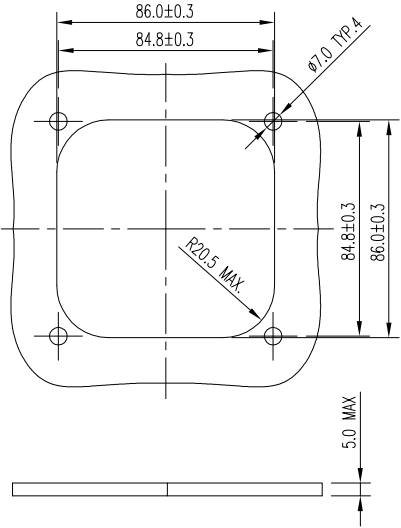
- A two-stage lever provides an HVIL time delay
- 2 x integrated internal HVIL
- Unique cooling structure
- Dual-channel design lowers temperature rise
- No tools required to unmate
- Various fuse ratings
- Receptacle can be front or rear mounted

APPLICATION	
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.	
MECHANICAL	
Mating cycles	≥ 50 cycles
ELECTRICAL	
Fuse specification	up to 630A
With fuse:	
Rated current	Current is approximately 1/3 the fuse rating
Rated voltage	600V DC
With shunt:	
Rated current	260A Max @ Ambient 70°C
Rated voltage	1000V DC Max
ENVIRONMENTAL	
Protection degree	IP67, IP6K9K (mated)
Ambient temperature	-40°C to 70°C
Storage temperature	-40°C to 85°C
Operating temperature	-40°C to 125°C
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

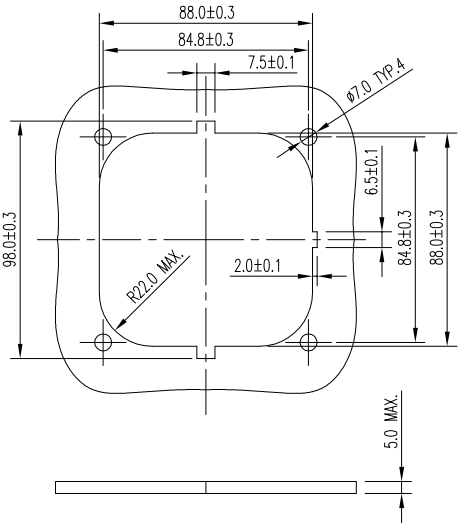
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



DUST CAP AVAILABLE
P/N: C270006810



HOW TO ORDER - EXCEL|MATE MSD

	MSD	M	350	2	F
Shell type:					
M: Plug					
F: Receptacle					
Fuse rating current:					
XXX: 200, 250, 315, 350, 400, 450, 500, 550, 630 (Unit: AMP)					
000: No fuse needed, can directly use the terminal					
Fuse brand (this applies to plugs) :					
1: Ferraz					
2: Bussmann					
Flange mounted type (this applies to sockets) :					
F: Front mounted					
R: Rear mounted					

EXCEL|MATE MSD V - TECHNICAL CHARACTERISTICS



MSD V is an upgraded version of the standard MSD.

It provides a rated voltage of 800V and a plug with integrated fuse. The other parameters remain unchanged.

KEY FEATURES

A two-stage lever provides an HVIL time delay

2 x integrated internal HVIL

Unique cooling structure

Dual-channel design lowers temperature rise

No tools required to unmate

Various fuse ratings

Receptacle can be front or rear mounted

APPLICATION

It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.

MECHANICAL

Mating cycles	≥ 50 cycles
---------------	-------------

ELECTRICAL

Fuse specification	up to 630A
--------------------	------------

With fuse:

Rated current	Current is approximately 1/3 the fuse rating
---------------	--

Rated voltage	800V DC
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With shunt:

Rated current	260A Max @ Ambient 70°C
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Rated voltage	1000V DC Max
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ENVIRONMENTAL

Protection degree	IP67, IP6K9K (mated)
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Ambient temperature	-40°C to 70°C
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Storage temperature	-40°C to 85°C
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Operating temperature	-40°C to 125°C
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Flammability	UL94V0
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STANDARDS

USCAR-2

USCAR-37

LV-215

RoHS

Plug

	MSD V	M	350	/
Shell type:				
M: Plug				
Fuse rating current:				
XXX: 200, 250, 315, 350, 400, 450, 500, 550, 630				
(Unit: AMP)				
000: No fuse needed, can directly use the terminal				
Fuse brand:				
/ : Bussmann (by default)				
For other brands, please contact us				

Receptacle

	MSD V	1	F	000	F
Contact:					
1: Improved contact conductivity					
Shell type:					
F: Receptacle					
Fuse rating current:					
000: No fuse needed, can directly use the terminal					
Flange mounted type:					
F: Front mounted					
R: Rear mounted					

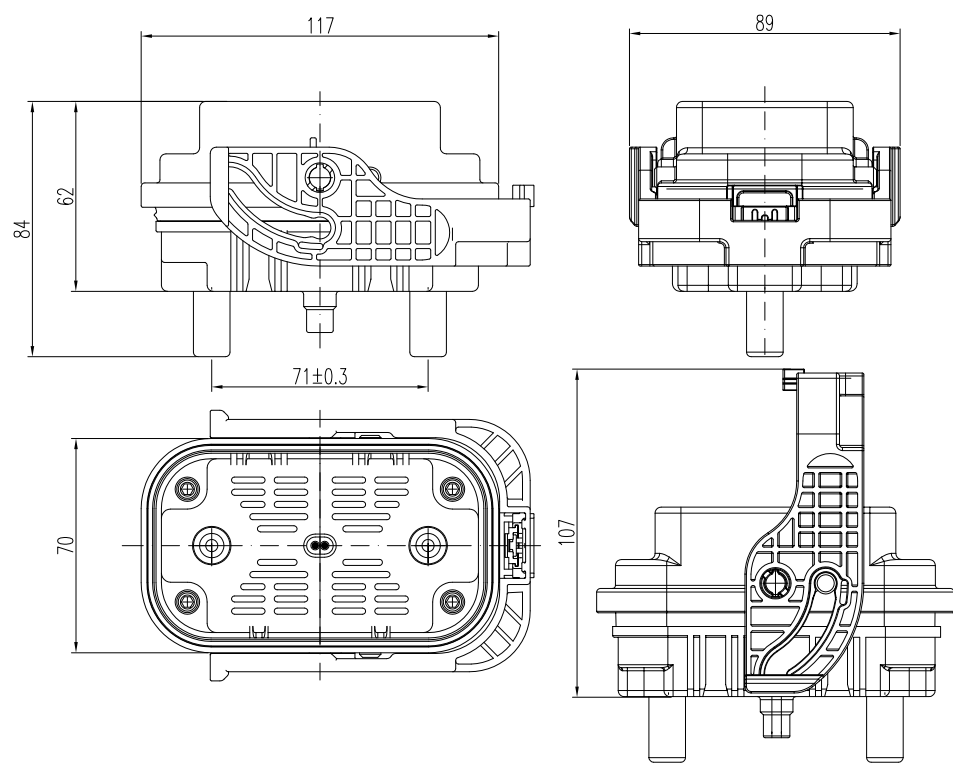


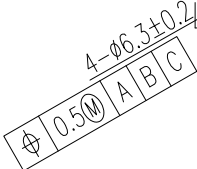
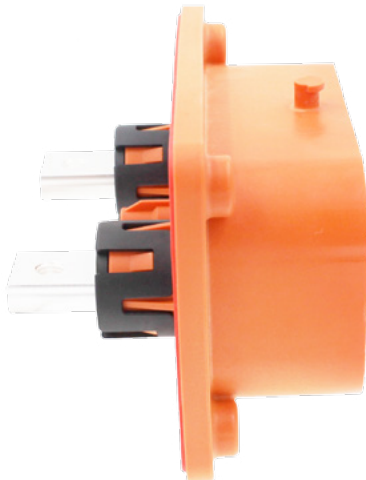
KEY FEATURES

- 1 x integrated internal HVIL
- Unique cooling structure
- High current contacts with Amphenol Radsok technology
- No tools required to unmate
- Various fuse ratings
- Receptacle can be front or rear mounted

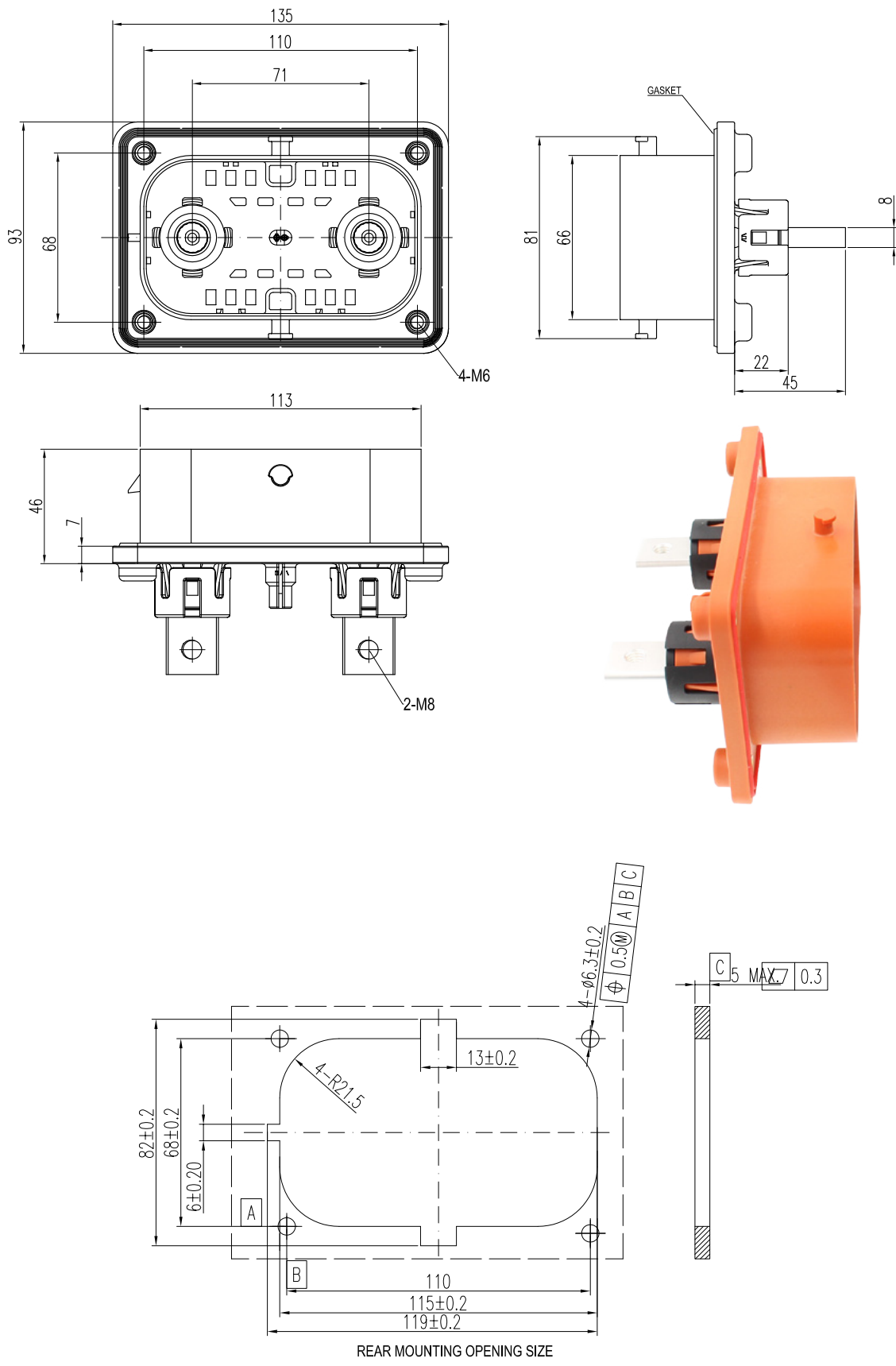
APPLICATION	
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.	
MECHANICAL	
Mating cycles	≥ 500 cycles
ELECTRICAL	
Fuse specification	up to 630A
With fuse:	
Rated current	300A Max
Rated voltage	1000V DC
With shunt:	
Rated current	300A
Rated voltage	1500V DC Max
ENVIRONMENTAL	
Protection degree	IP67, IP6K9K (mated)
Ambient temperature	-40°C to 70°C
Storage temperature	-40°C to 85°C
Operating temperature	-40°C to 125°C
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

PRODUCT DIMENSIONS





REAR MOUNTED



	MSD XL	M	350	/	F
Shell type:					
M: Plug					
F: Receptacle					
Fuse rating current:					
XXX: 160, 200, 250, 315, 350, 400, 450, 500, 550, 630					
(Unit: AMP)					
000: No fuse needed, can directly use the terminal					
Fuse brand (this applies to plugs):					
/ : Bussmann (by default)					
For other brands, please contact us					
Flange mounted type (this applies to sockets) :					
F: Front mounted					
R: Rear mounted					



Amphenol PCD MINI Manual Service Disconnect

Mini MSD has been developed from the standard MSD. Smaller in size and lower in cost, it offers a more compact solution.

Available in a scalable design with a variety of fuse ratings.

EXCEL|MATE MINI MSD - TECHNICAL CHARACTERISTICS



KEY FEATURES

A two-stage lever provides an HVIL time delay

1 x integrated internal HVIL

Unique cooling structure

Dual-channel design lowers temperature rise

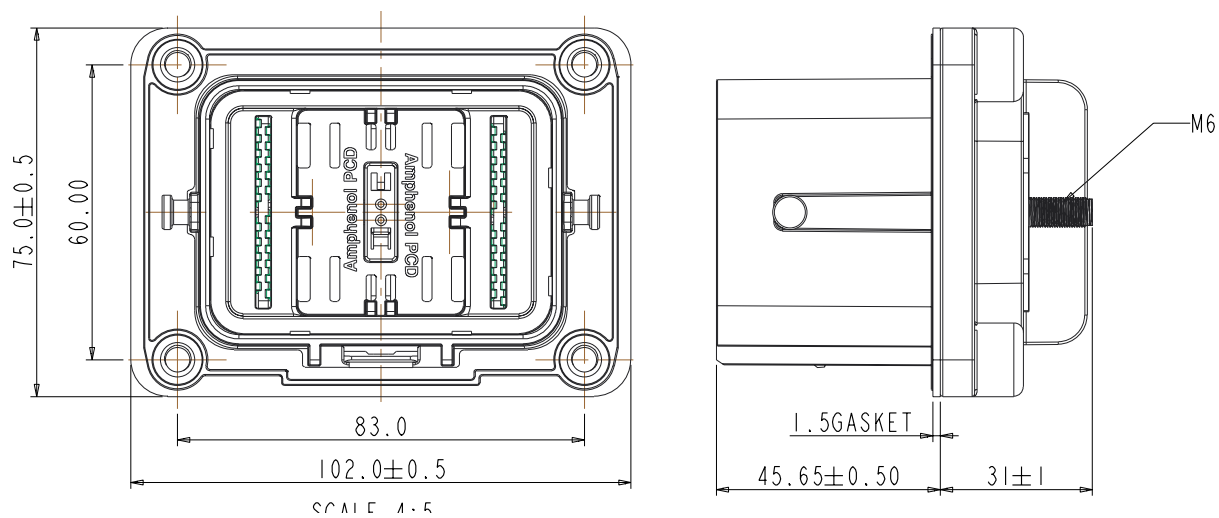
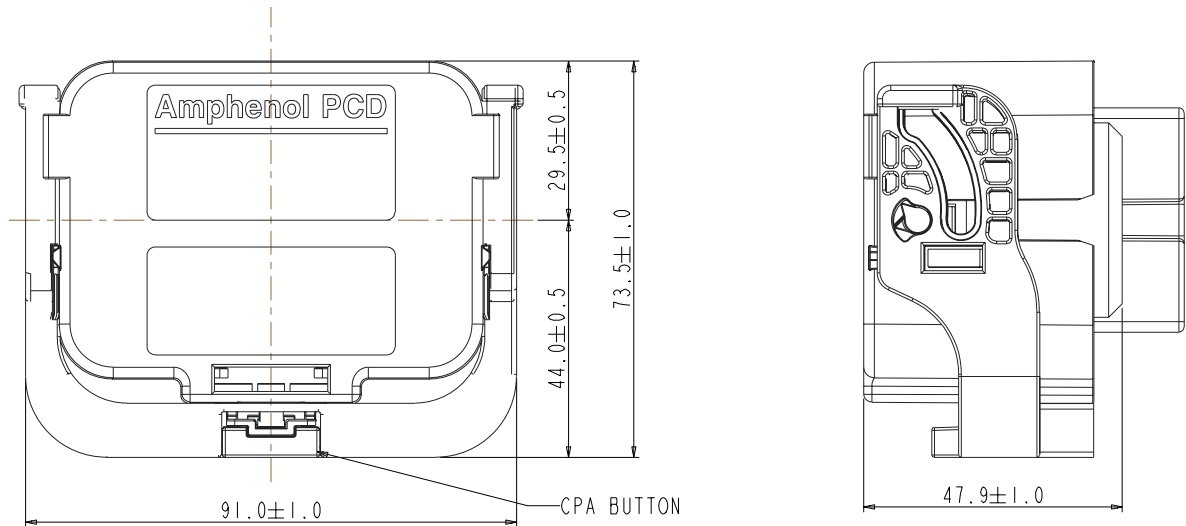
No tools required to unmate

Various fuse ratings

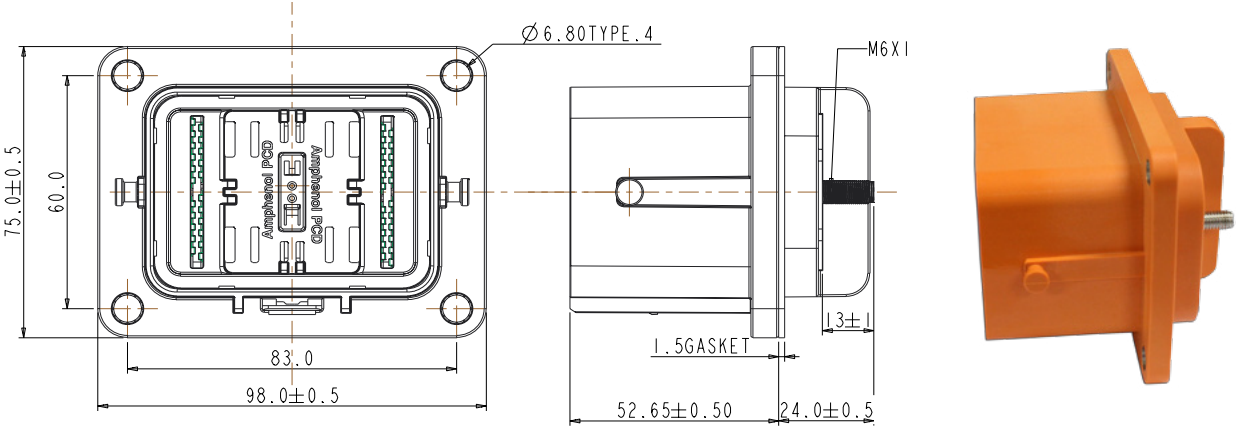
Receptacle can be front or rear mounted

APPLICATION	
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.	
MECHANICAL	
Mating cycles	≥ 50 cycles
ELECTRICAL	
Fuse specification	up to 400A
With fuse:	
Rated current	Current is approximately 1/3 the fuse rating (170A Max)
Rated voltage	600V to 700V DC
With shunt:	
Rated current	170A Max
Rated voltage	1500V DC Max
ENVIRONMENTAL	
Protection degree	IP67, IP6K9K (mated)
Ambient temperature	-40°C to 70°C
Storage temperature	-40°C to 85°C
Operating temperature	-40°C to 125°C
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

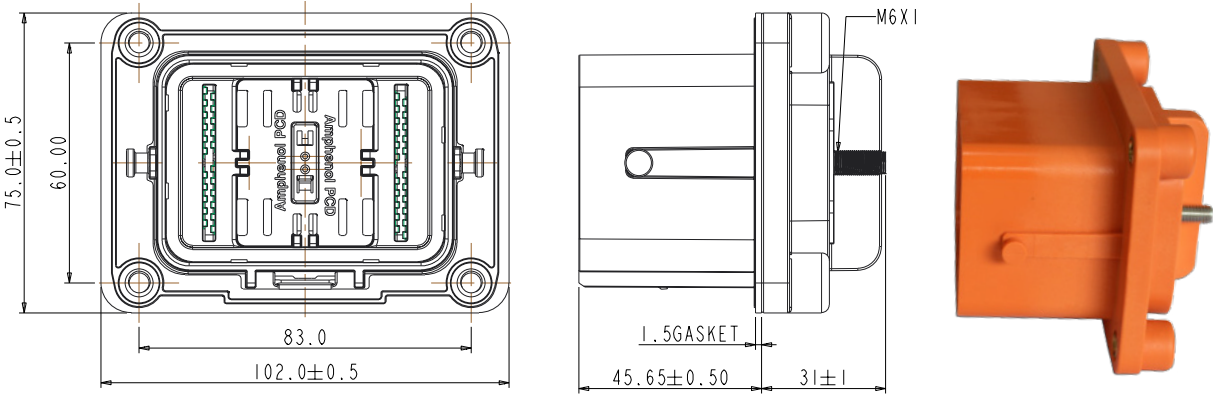
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



DUST CAP AVAILABLE:
P/N: C270006809



HOW TO ORDER - EXCEL|MATE MINI MSD

	MINI MSD	M	XXX	/	F
Shell type:					
M : Plug					
F : Receptacle					
Fuse rating current:					
XXX : 080, 100, 125, 160, 200, 250, 315, 350, 400 (Unit: AMP)					
000 : No fuse needed, can directly use the terminal					
Fuse brand (this applies to plugs):					
/ : Bussmann (by default)					
1 : Other brands (TBD)					
Flange mounted type (this applies to sockets):					
F : Front mounted					
R : Rear mounted					

EXCEL|MATE MINI MSD V - TECHNICAL CHARACTERISTICS



KEY FEATURES

A two-stage lever provides an HVIL time delay

1 x integrated internal HVIL

Unique cooling structure

Dual-channel design lowers temperature rise

No tools required to unmate

Various fuse ratings

Receptacle can be front or rear mounted

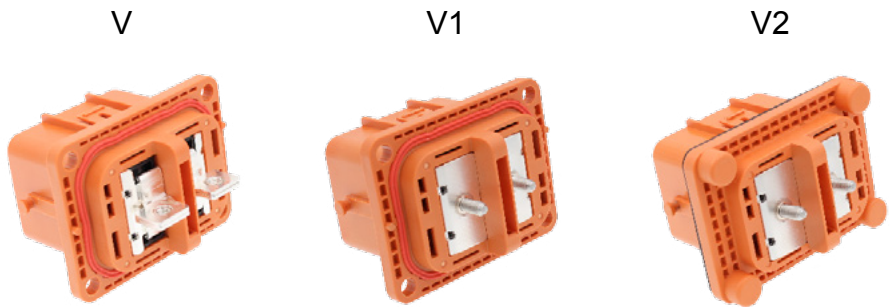
APPLICATION	
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.	
MECHANICAL	
Mating cycles	≥ 50 cycles
ELECTRICAL	
Fuse specification	up to 400A
With fuse:	
Rated current	Current is approximately 1/3 the fuse rating (170A Max)
Rated voltage	600V to 700V DC
With shunt:	
Rated current	220A Max
Rated voltage	1500V DC Max
ENVIRONMENTAL	
Protection degree	IP67, IP6K9K (mated)
Ambient temperature	-40°C to 70°C
Storage temperature	-40°C to 85°C
Operating temperature	-40°C to 125°C
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

Plug

	MINI MSD	M	XXX	/
Shell type:				
M: Plug				
Fuse rating current:				
XXX: 080, 100, 125, 160, 200, 250, 315, 350, 400				
(Unit: AMP)				
000: No fuse needed, can directly use the terminal				
Fuse brand:				
/ : Bussmann (by default)				
1: Other brands (TBD)				

Receptacle

	MINI MSD	V	F	000	F
V: Built-in gasket seal, row connection					
V1: Built-in gasket seal, stud connection					
V2: Flat gasket seal, stud connection					
Shell type:					
F: Receptacle					
Fuse rating current:					
000: No fuse needed, can directly use the terminal					
Flange mounted type:					
F: Front mounted					
R: Rear mounted (only available for V2)					



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Notes:

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Amphenol PCD Shenzhen reserves the right to clarify this catalog.